

## **REMARKS**

In response to the above-identified Office Action, Applicants respectfully request reconsideration of the Application in view of the following remarks. In this Response, Applicants do not amend, cancel, or add any new claims. Accordingly, claims 1-6, 8-39, 41-63, and 65-82 remain pending in the Application.

### **I. Claims Rejected Under 35 U.S.C. § 102**

#### **A. The *Kidder* Reference**

Claims 1, 4, 9-11, 14-17, 19-21, 23-26, 34, 37, 42-44, 47-50, 52-54, 56-58, 61, 66-68, 71-74, 76-78, and 80-81 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,445,774 issued to Kidder et al. (“*Kidder*”). Applicants respectfully traverse the rejection.

To anticipate a claim, the cited reference must disclose each and every element of the rejected claim (*see* MPEP § 2131). Among other elements, independent claim 1 defines a method for decision analysis and resolution comprising the steps of:

- 1) relating a solution to the event based on the root cause;
- 2) determining whether the solution can resolve the event automatically; and
- 3) automatically resolving the event when the event can be resolved automatically.

Applicants submit that *Kidder* fails to disclose elements a), b), and c) of claim 1.

#### **1) Relating a Solution to the Event Based on the Root Cause**

In making the rejection, the Patent Office alleges that the Abstract of *Kidder* discloses the above-recited elements of claim 1. Specifically, the Patent Office characterizes the *Kidder*’s Abstract as disclosing:

An automated workflow system [that] provides automated alarm report dissemination and processing. The automated workflow system provides a graphical interface to view and manipulate alarm reports and to automatically create and handle **event reports** and trouble tickets. **The workflow system also allows network monitors to identify which network component within the network generated the alarm {this is the root cause}** [Examiner considers handling an event report as solving the event]. (Paper No./Mail Date 20070326, pages 2-3, emphasis in original).

Applicants submit that “handling” an event, as defined by *Kidder*, does not relate a solution to the event as alleged by the Patent Office, and respectfully disagree with the Patent Office’s characterization of *Kidder*’s Abstract.

Column 12, lines 3-6 of *Kidder* states, “Once the network monitor has assigned an alarm report to an event, the workflow LCA updates each alarm report to indicate that its anomaly status is ‘handled’, meaning the alarm report has been assigned to an event.” Therefore, Applicants submit that *Kidder* defines the term “handle” as the action of assigning an event report to an event. Thus, Applicants submit that “handling” an event report is not the same as relating a solution to the event because assigning an event report to an event creates an association between the report and the event (i.e., a problem), whereas relating a solution to an event or problem will, if implemented, eliminate the event. In other words, after *Kidder* assigns the report to the event (i.e., handling the status of the report), the event or problem continues to exist. Accordingly, “handling” an event report cannot be the same as relating a solution to the event as alleged by the Patent Office.

Applicants reproduce below *Kidder*’s Abstract in its entirety:

Methods and systems for automating the dissemination and processing of alarm reports received from a telecommunications network are provided. Alarm reports, which are provided to network monitors by a network management system, correspond to alarms that are generated by the telecommunications network. Network monitors view these alarm reports and group them together to form event reports. The network monitors then uses the event reports to produce trouble reports that are processed by a trouble management system. The trouble management system dispatches field engineers to repair networks anomalies in accordance with these trouble reports. An automated workflow system provides automated alarm report dissemination and processing. The automated workflow system provides a **graphical interface to view and manipulate alarm reports** and to automatically create and handle event reports and trouble tickets. The workflow system also allows network monitors to identify which network component within the telecommunications network generated a specific alarm and to append telecommunications network site and topology data to event reports. The automated workflow system also tracks the status of the trouble tickets subsequent to their creation and automatically updates associated event and alarm reports. (Emphasis added).

As discussed above, the Patent Office alleges that the disclosure of “the workflow system also allows network monitors to identify which network component within the network generated the alarm” in the Abstract discloses a root cause to the event. Applicants respectfully disagree with this characterization of the disclosure in *Kidder*’s Abstract.

Looking to the specific language cited in *Kidder*’s Abstract, the network monitors are allowed to identify which network components generated the alarm; however, simply identifying that a component is malfunctioning is not the equivalent to identifying what is the cause of the malfunction. By analogy, being able to identify that a component is malfunctioning because it is not producing an output is not the same as identifying that the output is not being produced because, for example, there is a short in the component or some other problem preventing the component from functioning properly. Therefore, identifying a component that generated an alarm is not the same as identifying the cause of the problem that resulted in the alarm being generated. Accordingly, Applicants submit at least for the reasons above, *Kidder* fails to disclose “relating a solution to the event based on the root cause,” as recited in claim 1.

## **2) Determining Whether the Solution Can Resolve the Event Automatically**

The Patent Office alleges that column 4, lines 49-50 of *Kidder* disclose the above elements of claim 1. Specifically, the Patent Office alleges that the disclosure of, “these tools automate network monitor procedures such as ... and updating alarm report status to indicate which alarm reports have been cleared by the closing of an event” discloses that when a report is cleared, it is determined that the solution resolved the event (Paper No./Mail Date 20070326, page 3). In other words, the Patent Office alleges that clearing a report indicates that the solution resolved the event is the equivalent to “determining whether the solution can resolve the event automatically,” as recited in claim 1. Applicants respectfully disagree.

As an initial matter, the cited section of *Kidder* discloses updating a report status to indicate which, if any, have been cleared because the event has been closed. Applicants submit that making such an update in no way discloses whether a particular solution is capable of automatically resolving the event because updating an alarm report status replaces a prior state of the alarm with a current state of the alarm, which is not even remotely connected to problems or solutions to problems.

Furthermore, Applicants submit that “when a report is cleared, it is determined that the solution resolved the event,” as cited by the Patent Office is not the equivalent to “determining whether the solution can resolve the event automatically,” as recited in claim 1. Specifically, determining that a solution resolved an event is a conclusion that is reached after the event is actually resolved, whereas automatically determining whether the solution can resolve the event is a process that occurs prior to the event actually being resolved. That is, in automatically determining whether the solution can resolve the event, the particular solution may or may not actually resolve the event, but the determining process provides an answer to the query of, “is this event capable of being resolved by this solution.” Therefore, at least for the reasons discussed above, *Kidder* fails to disclose “determining whether the solution can resolve the event automatically,” as recited in claim 1.

### **3) Automatically Resolving the Event When the Event Can Be Resolved Automatically**

The Patent Office alleges that column 4, line 44 of *Kidder* disclose the above elements of claim 1. Specifically, the Patent Office alleges that the disclosure of, “these tools automate network monitor” discloses “automatically resolving the event when the event can be resolved automatically,” as recited in claim 1 (*see Paper No./Mail Date 20070326*, page 3). Applicants respectfully disagree.

Applicants reproduce Column 4, lines 43-50 of *Kidder*, below:

These tools automate network monitor procedures such as creating events, assigning alarm reports to events, creating trouble tickets against events, assigning trouble tickets to network monitors, tracking trouble tickets, updating alarm report status to indicate which alarm reports have been handled by a trouble ticket, and updating alarm report status to indicate which alarm reports have been cleared by the closing of an event.

Applicants submit that these tools disclosed by *Kidder* merely automate the administrative processes of creating an event (i.e., a problem) from alarm reports, tracking the progress of the event as it is being worked out, and closing the event when the problem has been fixed. There is no indication that these tools themselves automatically resolve (i.e., fix) the event, only that the tools administratively monitor the event. In fact, *Kidder* states that:

The automated workflow system is a set of tools for interfacing network monitors, service management systems such as TMSs, and network management systems. The automated workflow system provides a graphical interface that supports the network monitors in generating event reports and providing trouble tickets to field engineers. (Col. 5, lines 55-61, emphasis added).

*Kidder* also discloses that the TMS 205 is responsible for distributing trouble tickets to the field engineers for appropriate servicing” (Col. 6, line 66-Col. 7, line 1, emphasis added). Furthermore, *Kidder* discloses that, in response to a network anomaly at an identified site, the network monitor “obtains the site specific information [and] typically contacts the on-site personnel and apprises them of the anomaly. In some instances, the on-site personnel can resolve the anomaly and terminate the alarm generated by the telecommunications network 400” (*Kidder*, Col. 8, lines 30-49, emphasis added). Therefore, Applicants submit that the system in *Kidder* does not actually resolve or fix any

problems, but rather, notifies field engineers or on-site personnel of the problem, and the field engineers or the on-site personnel fix the problem, not the system. Accordingly, at least for the reasons discussed above, Kidder fails to disclose “automatically resolving the event when the event can be resolved automatically,” as recited in claim 1.

At least for the reasons discussed above, *Kidder* fails to disclose each and every element of claim 1. Therefore, claim 1 is not anticipated by *Kidder*. Accordingly, Applicants respectfully request withdrawal of the rejection of independent claim 1.

Claims 4, 9-11, 14-17, 19-21, and 23-24 depend from claim 1 and include all of the elements thereof. Therefore, Applicants submit that claims 4, 9-11, 14-17, 19-21, and 23-24 are not anticipated by *Kidder* at least for the same reasons as claim 1, in addition to their own respective features. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 4, 9-11, 14-17, 19-21, and 23-24.

Regarding claims 25-26, 34, 37, 42-44, 47-50, 52-54, 56-58, 61, 66-68, 71-74, 76-78, and 80-81, Applicants submit that each of these claims recite elements similar to claim 1 discussed above. Therefore, Applicants submit that claims 25-26, 34, 37, 42-44, 47-50, 52-54, 56-58, 61, 66-68, 71-74, 76-78, and 80-81 are not anticipated by *Kidder* at least for the same reasons as claim 1, in addition to their own respective features. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 25-26, 34, 37, 42-44, 47-50, 52-54, 56-58, 61, 66-68, 71-74, 76-78, and 80-81.

## **B. The *Grace* Reference**

Claim 82 stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,748,098 issued to Grace (“*Grace*”). Applicants respectfully traverse the rejection.

To anticipate a claim, the cited reference must disclose each and every element of the rejected claim (*see* MPEP § 2131). Among other elements, claim 82 defines a computer-implemented method for analyzing and resolving a fault within a computing system comprising “automatically resolving the event, by the computing system, if the root cause has a statistically significant correlation with a set of tasks leading to the solution” (emphasis added). Applicants submit that Grace fails to disclose at least these elements of claim 82.

In making the rejection, the Patent Office characterizes Col. 2, lines 51-52 and Col. 2, line 65-Col.3, line 10 of *Grace* as disclosing the above-referenced elements of claim 82. Applicants respectfully disagree with the Patent Office's characterization of *Grace*.

*Grace* is entitled, EVENT CORRELATION, and *Grace*'s Abstract states:

simultaneous events reported to an equipment management system are compared with historical data in order to establish whether there is a relationship between the events. Historical data is used to determine the statistical probability of the event occurring independently simultaneously. (Emphasis added).

Moreover, the sections of *Grace* cited by the Patent Office disclose that event correlation includes “identifying alarm conditions occurring in the telecommunications network within a predetermined temporal window, correlating the identified alarm conditions by analysing the historical data to determine the statistical probabilities of pairs of the identified alarm conditions occurring by chance within the same temporal window” (*Grace*, Col. 2, line 63-Col. 3, line 2). In fact, *Grace* states that, “preferably the method includes the steps of selecting one of the identified alarm conditions, and for each of the remaining identified alarm conditions, determining the statistical probability of that alarm condition and the selected alarm condition occurring by chance in the same temporal window” (*Grace*, Col. 3, lines 16-21). *Grace* then concludes by disclosing that:

The invention relies on an analysis of the statistical probability of the simultaneous occurrence of the alarm conditions. In essence, it relies on the fact that there is a very low probability of two independent alarm conditions, both themselves rare, occurring simultaneously. It follows that if there is nevertheless a history of two rare alarm conditions occurring simultaneously, it is probable that the alarm conditions are not independent, and that there is a relationship between them. The method may be used to compare alarm conditions selected pair-wise by the operator for possible matches, but in another arrangement the comparison is made between all alarm conditions occurring simultaneously, which are then ranked in order of their calculated probability of having occurred together at one time by chance. (*Grace*, Col. 3, line 59-Col. 4, line 5).

Therefore, Applicants submit that *Grace* discloses a device that uses statistical analysis to determine the probability that two events are correlated or related to one another, which is not the same as automatically resolving the event “if the root cause has a statistically significant correlation with a

set of tasks leading to the solution,” as recited in claim 82. Specifically, a system that is designed to determine if two events are related to one another based on the probability of each event occurring independently is clearly not the same as resolving the fault if a root cause of a fault can be statistically linked to a set of tasks leading to a solution because the alarm condition (i.e., the problem, malfunction, or fault) remains unresolved regardless of whether or not the events are statistically related to one another. By contrast, the elements at issue clearly indicate that the fault is resolved if a set of tasks leading to a solution have a statistically significant correlation with a root cause of the fault. Therefore, *Grace* fails to disclose each and every element of claim 82.

The failure of *Grace* to disclose each and every element of claim 82 is fatal to the anticipation rejection. Therefore, claim 82 is not anticipated by *Grace*. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 82.

## **II. Claims Rejected Under 35 U.S.C. § 103**

### **A. *Kidder* in view of *Valadarsky***

Claims 2-3, 8, 35-36, 41, 59-60, and 65 stand rejected under 35 U.S.C. § 103(a) as being obvious over *Kidder* in view of U.S. Patent No. 7,043,661 issued to Valadarsky et al. (“*Valadarsky*”). Applicants respectfully traverse the rejection.

To render a claim obvious, the cited references must teach or suggest each and every element of the rejected claim (*see* MPEP § 2143). Claims 2-3, 8, 35-36, 41, 59-60, and 65 each depend from an independent claim (i.e., independent claims 1, 34, and 58) discussed above with respect to the anticipation rejection based on *Kidder*. In rejecting claims 2-3, 8, 35-36, 41, 59-60, and 65, the Patent Office characterizes *Kidder* similar to the anticipation rejection discussed above. Applicants have discussed above the shortcomings of *Kidder* in disclosing each and every element of independent claims 1, 34, and 58, and submit that such discussion is equally applicable to an obviousness rejection of claims that depend from claims 1, 34, and 58 based on *Kidder*. The Patent Office relies on the disclosure in *Valadarsky* to cure the defects of *Kidder*; however, Applicants submit that *Valadarsky* fails to cure such defects.

In making the rejection, the Patent Office does not cite *Valadarsky* as teaching or suggesting the elements of “relating a solution to the event based on the root cause, determining whether the



solution can resolve the event automatically,” and “automatically resolving the event when the event can be resolved automatically,” as recited in claims 2-3 and 8 via independent claim 1, or similarly recited in claims 35-36 and 41 via independent claim 34, and claims 59-60 and 65 via independent claim 58. Moreover, in reviewing *Valadarsky*, Applicants are unable to discern any sections of *Valadarsky* disclosing such elements. Therefore, *Valadarsky* fails to cure the defects of *Kidder*. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 2-3, 8, 35-36, 41, 59-60, and 65.

**B. *Kidder* in view of *Paradies***

Claims 5-6, 8, 12-13, 18, 22, 27-33, 38-39, 41, 45-46, 51, 55, 62-63, 65, 69-70, 75, and 79 stand rejected under 35 U.S.C. § 103(a) as being obvious over *Kidder* in view of U.S. Patent No. 6,463,441 issued to Paradies (“*Paradies*”). Applicants respectfully traverse the rejection.

To render a claim obvious, the cited references must teach or suggest each and every element of the rejected claim (*see* MPEP § 2143). Claims 5-6, 8, 12-13, 18, 22, 27-33, 38-39, 41, 45-46, 51, 55, 62-63, 65, 69-70, 75, and 79 each depend from an independent claim (i.e., independent claims 1, 34, and 58) discussed above with respect to the anticipation rejection based on *Kidder*. In rejecting claims 5-6, 8, 12-13, 18, 22, 27-33, 38-39, 41, 45-46, 51, 55, 62-63, 65, 69-70, 75, and 79, the Patent Office characterizes *Kidder* similar to the anticipation rejection discussed above. Applicants have discussed above the shortcomings of *Kidder* in disclosing each and every element of independent claims 1, 34, and 58, and submit that such discussion is equally applicable to an obviousness rejection of claims that depend from claims 1, 34, and 58 based on *Kidder*. The Patent Office relies on the disclosure in *Paradies* to cure the defects of *Kidder*; however, Applicants submit that *Paradies* fails to cure such defects.

In making the rejection, the Patent Office does not cite *Paradies* as teaching or suggesting the elements of “relating a solution to the event based on the root cause, determining whether the solution can resolve the event automatically,” and “automatically resolving the event when the event can be resolved automatically,” as recited in claims 5-6, 8, 12-13, 18, 22, and 27-33 via independent claim 1, or similarly recited in claims 38-39, 41, 45-46, 51, and 55 via independent claim 34, and claims 62-63, 65, 69-70, 75, and 79 via independent claim 58. Moreover, in reviewing *Paradies*,

Applicants are unable to discern any sections of *Paradies* disclosing such elements. Therefore, *Paradies* fails to cure the defects of *Kidder*. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 5-6, 8, 12-13, 18, 22, 27-33, 38-39, 41, 45-46, 51, 55, 62-63, 65, 69-70, 75, and 79.

### **CONCLUSION**

In view of the foregoing, it is believed that all claims now pending are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (480) 385-5060 or [jgraff@ifllaw.com](mailto:jgraff@ifllaw.com).

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-2091 for any fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,  
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